

## **ATAYERO: List of Publications**

Aderemi A. **Atayero**

Department of Electrical and Information Engineering  
School of Engineering, Covenant University  
Ota, Nigeria

*aaa@covenantuniversity.edu.ng*

### **Introduction**

This list of publications from the research activities of *Atayero* is presented in three main subsections namely: a) articles reporting the research findings of the author as reported in peer-reviewed International journals as well as conference proceedings are listed [1– [A](#)]; b) the authors articles published as chapters in books [[B–C](#)]; and c) edited books and monographs [[D–E](#)]. It is noted here that the domain of expertise of the author covers all aspects of Information and Communication Engineering and Technology.

Journals were selected based on their scope as advertised in their respective calls for contribution (a.k.a. call for papers) and special attention was accorded generally accepted ones in the contextual research area. Also notable is the fact that not a single one of the author's initial submission was ever rejected. A number of the journal publications were very highly rated and awarded certificates of excellence. Some were initially presented as conference papers, and after receiving awards of excellence are to be published as invited journal papers, and book chapters in special editions from highly reputed publishing outfits such as *Elsevier*, *Springer*, *IEEEExplore*, *Taylor&Francis et cetera*. What follows is a detailed list of the author's publications as Principal Investigator of *The IoT-enabled Smart and Connected Communities Cluster (SmartCU)* of Covenant University, Ota, Nigeria.

## PUBLICATIONS

### A. INTERNATIONAL PEER-REVIEWED ARTICLES

- [001]. [2018-17](#): A.A. Atayero, et al., Incidence of cassava mosaic disease and associated whitefly vectors in South West and North Central Nigeria: Data exploration
- [002]. [2018-16](#): A.A. Atayero, et al., Students' Participation in Hult Prize (HP) & Decision for Entrepreneurship: Data gathered from HP-18 Regional Finals in Nigeria
- [003]. [2018-15](#): A.A. Atayero, et al., Citation analytics: Data exploration & comp-analyses of CiteScores of OA & Subscription publications in Scopus (2014–2016)
- [004]. [2018-14](#): A.A. Atayero, et al., Datasets linking ethnic perceptions to undergraduate students learning outcomes in a Nigerian Tertiary Institution
- [005]. [2018-13](#): A.A. Atayero, et al., Comparative assessment of data obtained using empirical models for path loss predictions in a university campus environment
- [006]. [2018-12](#): A.A. Atayero, et al., The Role of Gender on Academic Performance in STEM-related disciplines: Data from a Tertiary Institution
- [007]. [2018-11](#): A.A. Atayero, et al., Datasets on demographic trends in enrollment into undergraduate engineering programs at Covenant University, Nigeria
- [008]. [2018-10](#): A.A. Atayero, et al., Optimal Model for Path Loss Predictions using Feed-Forward Neural Networks
- [009]. [2018-09](#): A.A. Atayero, et al., Dataset on statistical analysis of editorial board composition of Hindawi journals indexed in Emerging sources citation index
- [010]. [2018-08](#): A.A. Atayero, et al., Smart Campus: Data on Energy Generation Costs from Distributed Systems of Electrical Energy in a Nigerian University
- [011]. [2018-07](#): A.A. Atayero, et al., Received signal strength and local terrain profile data for radio network planning and optimization at GSM frequency bands
- [012]. [2018-06](#): A.A. Atayero, et al., Learning analytics: Dataset for empirical evaluation of entry requirements into engrg. UG programs in a Nigerian University
- [013]. [2018-05](#): A.A. Atayero, et al., Path loss dataset for modeling radio wave propagation in smart campus environment
- [014]. [2018-04](#): A.A. Atayero, et al., Learning analytics for smart campus: Data on academic performances of engineering UG in Nigerian private university
- [015]. [2018-03](#): A.A. Atayero, et al., Data on the key performance indicators for quality of service of GSM networks in Nigeria
- [016]. [2018-02](#): A.A. Atayero, et al., Smart campus: Data on energy consumption in an ICT-driven university
- [017]. [2018-01](#): A.A. Atayero, et al., Learning attributes of summa cum laude students: Experience of a Nigerian university
- [018]. [2017-22](#): A.A. Atayero, et al., Massive MIMO Channel Characterization and Modeling: The Present and the Future
- [019]. [2017-21](#): A.A. Atayero, et al., Outdoor Path Loss Predictions Based on Extreme Learning Machine
- [020]. [2017-20](#): A.A. Atayero, et al., A Framework for Electronic Toll Collection in Smart and Connected Communities.
- [021]. [2017-19](#): A.A. Atayero, et al., Statistical Evaluation of Quality of Service Offered by GSM Network Operators in Nigeria.
- [022]. [2017-18](#): A.A. Atayero, et al., Occupancy Controlled Lighting System for Smart Buildings
- [023]. [2017-17](#): A.A. Atayero, et al., Development of a Power-harnessing Smart Shoe with Outdoor Navigation.
- [024]. [2017-16](#): A.A. Atayero, et al., Ransomware: Current Trend, Challenges, and Research Directions.
- [025]. [2017-15](#): A.A. Atayero, et al., A Survey on Traffic Evacuation Techniques in Internet of Things Network Environment
- [026]. [2017-14](#): A.A. Atayero, et al., Free Energy Generation using Neodymium Magnets: An Off-Grid Sustainable Energy Solution for Sub-Saharan Africa
- [027]. [2017-13](#): A.A. Atayero, et al., Smart Assistive mHealth System for Medication Adherence in Patients with Alzheimer's Disease.
- [028]. [2017-12](#): A.A. Atayero, et al., Digital Speed Control of DC Motor for Industrial Automation using Pulse Width Modulation Technique.
- [029]. [2017-11](#): A.A. Atayero, et al., Calibrating the Standard Path Loss Model for Urban Environments using Field Measurements and Geospatial Data.
- [030]. [2017-10](#): A.A. Atayero, et al., Smart Weather Station for Rural Agriculture using Meteorological Sensors and Solar Energy.
- [031]. [2017-09](#): A.A. Atayero, et al., C-BRIG: A Network Architecture for Real-Time Information Exchange in Smart and Connected
- [032]. [2017-08](#): A.A. Atayero, et al., Plastic Mannequin-Based Robotic Telepresence for Remote Clinical Ward Rounding
- [033]. [2017-07](#): A.A. Atayero, et al., Smart Vehicular Traffic Management System using RFID Technology.
- [034]. [2017-05](#): A.A. Atayero, et al., MIMO Optimization Techniques and Their Application in Maximizing Throughput for 3GPP HSPA
- [035]. [2017-04](#): A.A. Atayero, et al., Cost-Effective Medical Robotic Telepresence Solution using Plastic Mannequin
- [036]. [2017-03](#): A.A. Atayero, et al., 5G Radio Access Network Technologies: Research Advances
- [037]. [2017-02](#): A.A. Atayero, et al., LTE-Advanced for Rapid Mobile Broadband Penetration in Developing Countries
- [038]. [2017-01](#): A.A. Atayero, et al., Solar Photovoltaic Automobile Recognition System for Smart-Green Access Control using RFID and LoRa LPWAN Technologies.
- [039]. [2016-13](#): A.A. Atayero, et al., From 3GPP LTE to 5G: An Evolution
- [040]. [2016-12](#): A.A. Atayero, et al., Comparative Analysis of Scheduling Techniques in Downlink LTE Using MATLAB-Based LTE MACLAB Simulator
- [041]. [2016-11](#): A.A. Atayero, et al., Comparative Analysis of Routing Internet Protocol and Open Shortest Path First Protocols Using QUALNET
- [042]. [2016-10](#): A.A. Atayero, et al., Propagation Model Optimization Based on Measurement from Macrocell Sites in Ikorodu-Epe, South- Western Nigeria
- [043]. [2016-09](#): A.A. Atayero, et al., Development of a Smart, Low-cost and IoT-enabled System for Energy Management Power Consumption.
- [044]. [2016-08](#): A.A. Atayero, et al., Call admission control techniques for 3GPP LTE: A survey.
- [045]. [2016-07](#): A.A. Atayero, et al., A robust preprocessing algorithm for iris segmentation from low contrast eye images
- [046]. [2016-06](#): A.A. Atayero, et al., Developing smart cities through optimal wireless mobile network
- [047]. [2016-05](#): A.A. Atayero, et al., Towards Building Smart Energy Systems in Sub-Saharan Africa: A Conceptual Analytics of Electric
- [048]. [2016-04](#): A.A. Atayero, et al., Development of Smart Assistive DTMF Home Automation System for Ageing Population
- [049]. [2016-03](#): A.A. Atayero, et al., Development of a Wireless Power Transfer System using Resonant Inductive Coupling
- [050]. [2016-02](#): A.A. Atayero, et al., Development of a Solar Photovoltaic Vulcanizing Machine towards Extreme Poverty Eradication in
- [051]. [2016-01](#): A.A. Atayero, et al., An Assessment of the Internet of Things (IoT) Adoption Readiness of Sub-Saharan Africa
- [052]. [2015-12](#): A.A. Atayero, et al., Relationship Between ICT Education and Knowledge Economy in Africa.
- [053]. [2015-11](#): A.A. Atayero, et al., Implementation of Biometric-RFID Identification System: A Case Study of Covenant University.
- [054]. [2015-10](#): A.A. Atayero, et al., The Changing Face of Education and the Dilemma of Massive Open Online Courses (MOOCs) in Nigerian Tertiary Institutions
- [055]. [2015-09](#): A.A. Atayero, et al., 3GPP LTE: An Overview.
- [056]. [2015-08](#): A.A. Atayero, et al., Integrating Internet of Things and EHealth Solutions for Students' Healthcare.
- [057]. [2015-07](#): A.A. Atayero, et al., Development of VirCEL: A Virtual Communication Engineering Laboratory.
- [058]. [2015-06](#): A.A. Atayero, et al., Cloud Security and Internet of Things: Impact on Virtual Learning Environment.
- [059]. [2015-05](#): A.A. Atayero, et al., Design and Construction of A Microcontroller-Based Automatic Irrigation System.
- [060]. [2015-04](#): A.A. Atayero, et al., Development of SeatSense: A WSN-Based Seat Locating System.
- [061]. [2015-03](#): A.A. Atayero, et al., Development of FIGA: A Novel Trust-Based Algorithm for Securing Autonomous Interactions in WSN.
- [062]. [2015-02](#): A.A. Atayero, et al., Human Capital, Institutions and Innovation: Anecdote of Two Countries.

- [063]. [2015-01](#): A.A. Atayero, et al., Programming Development of Kolmogorov-Smirnov Goodness-of-Fit Testing of Data Normality as a MS Excel® Library Function.
- [064]. [2014-18](#): A.A. Atayero, et al., Overcoming Students' Lethargy in Evaluating Lecturers' Teaching Competence: Covenant University Experience
- [065]. [2014-17](#): A.A. Atayero, et al., Development-oriented Testing Model: Case Study of The WAEC and Cambridge School Certificate Examinations
- [066]. [2014-16](#): A.A. Atayero, et al., Design And Implementation Construction of a Solar-Powered Street Light System
- [067]. [2014-15](#): A.A. Atayero, et al., Design And Implementation Of Learning-aid Software For Children
- [068]. [2014-14](#): A.A. Atayero, et al., The Concurrent and Predictive Validity of Covenant University Students' Evaluation of Lecturers' Teaching Competence
- [069]. [2014-13](#): A.A. Atayero, et al., Using Moodle 2.5 for e-Evaluation and Assignments for Students Learning at Covenant University
- [070]. [2014-12](#): A.A. Atayero, et al., Emerging Trends In Lifelong Learning: The Covenant University Perspective
- [071]. [2014-11](#): A.A. Atayero, et al., LTE Networks: Benchmarks, Prospects and Deployment Limitation
- [072]. [2014-10](#): A.A. Atayero, et al., Overcoming Barriers To New Learning Technologies In A University Setting: The Case Of Covenant University
- [073]. [2014-09](#): A.A. Atayero, et al., Design And Implementation Of A Virtual Computing Environment For Schools And Offices
- [074]. [2014-08](#): A.A. Atayero, et al., FOSS Implementation of an Educational Virtual Office Suite
- [075]. [2014-07](#): A.A. Atayero, et al., Self-Organizing Networks for 3GPP LTE
- [076]. [2014-06](#): A.A. Atayero, et al., Policy For Development And Use Of Open Educational Resources In Covenant University
- [077]. [2014-05](#): A.A. Atayero, et al., Open Education And Digital Scholarly Communication In Covenant University
- [078]. [2014-04](#): A.A. Atayero, et al., Implementing Open Access In A Private Nigerian University: A Case Study Of Covenant University
- [079]. [2014-03](#): A.A. Atayero, et al., Advances In Current Techniques For Monitoring The Progress Of Child Delivery
- [080]. [2014-02](#): A.A. Atayero, et al., 30 Billion Devices Automatically Interconnected By 2020: Impact On The Virtual Learning Environment
- [081]. [2014-01](#): A.A. Atayero, et al., Distributed Denial of Service (DDoS) Network Attacks: Impact On The Virtual Learning Environment.
- [082]. [2012-17](#): A.A. Atayero, et al., Development of *CUiris*: A Dark-Skinned African Iris Dataset for Enhancement of Image Analysis & Robust Personal Recognition
- [083]. [2012-16](#): A.A. Atayero, et al., Power Line Communication Technologies: Modeling and Simulation of PRIME Physical Layer
- [084]. [2012-15](#): A.A. Atayero, et al., Detection of DoS and DDoS Attacks in Information Communication Networks with Discrete Wavelet Analysis.
- [085]. [2012-14](#): A.A. Atayero, et al., The Spatial-Temporal Characteristic of Video Content and Its Impact on the Quality of Wireless Conduits
- [086]. [2012-13](#): A.A. Atayero, et al., Estimation of Markov Model Parameters from Statistical Analysis of Speech Packets Transmitted over BWA Networks
- [087]. [2012-12](#): A.A. Atayero, et al., Markov Models of Telephone Speech Dialogues
- [088]. [2012-11](#): A.A. Atayero, et al., Heterogeneous Wireless Networks: A Survey of Interworking Architectures
- [089]. [2012-10](#): A.A. Atayero, et al., Wideband Wireless Access System Interference Robustness: Its Effect on the Quality of Video Streaming
- [090]. [2012-09](#): A.A. Atayero, et al., Modeling and Simulation of a University LAN in OPNET Modeller Environment
- [091]. [2012-08](#): A.A. Atayero, et al., Effect of Error Packetization on the Quality of Streaming Video in Wireless Broadband Access Networks
- [092]. [2012-07](#): A.A. Atayero, et al., Adaptive Neuro-Fuzzy Inference System for Dynamic Load Balancing in 3GPP LTE
- [093]. [2012-06](#): A.A. Atayero, et al., A Soft Computing Approach to Dynamic Load Balancing in 3GPP LTE
- [094]. [2012-05](#): A.A. Atayero, et al., Satellite Packet Communication
- [095]. [2012-04](#): A.A. Atayero, et al., Applications of Soft Computing in Mobile and Wireless Communications
- [096]. [2012-03](#): A.A. Atayero, et al., Estimating the Quality of Digitally Transmitted Speech Signal over Satellite Communication Channels
- [097]. [2012-02](#): A.A. Atayero, et al., Interworking Architectures in Heterogeneous Wireless Networks: An Algorithmic Overview.
- [098]. [2012-01](#): A.A. Atayero, et al., Neural-encoded Fuzzy Models for Load Balancing in 3GPP LTE.
- [099]. [2011-11](#): A.A. Atayero, et al., Effect of Video Streaming Space-Time Characteristics on Quality of Transmission over Wireless Telecommunication Networks.
- [100]. [2011-10](#): A.A. Atayero, et al., Revisiting the Notion of Origin-Destination Traffic Matrix of the Hosts that are Attached to a Switched Local Area Network
- [101]. [2011-09](#): A.A. Atayero, et al., Detection of Tele traffic Anomalies Using Multifractal Analysis
- [102]. [2011-08](#): A.A. Atayero, et al., Development of *iSpeak*: A Voice-activated Relationship Management System
- [103]. [2011-07](#): A.A. Atayero, et al., Satellite Link Design: A Tutorial
- [104]. [2011-06](#): A.A. Atayero, et al., Development of *iCU*: A Plagiarism Detection Software
- [105]. [2011-05](#): A.A. Atayero, et al., Security Issues in Cloud Computing: The Potentials of Homomorphic Encryption
- [106]. [2011-04](#): A.A. Atayero, et al., Satellite Communications: Impact on Developing Economies
- [107]. [2011-03](#): A.A. Atayero, et al., 3GPP Long Term Evolution: Architecture, Protocols and Interfaces
- [108]. [2011-02](#): A.A. Atayero, et al., Compression of High-dimensional Data Spaces Using Non-differential Augmented Vector Quantization
- [109]. [2011-01](#): A.A. Atayero, et al., Estimation of the Quality of Video Streaming Under Desynchronization Conditions
- [110]. [2010-02](#): A.A. Atayero, et al., Designing an Enhanced VUI Tree Framework for e-Education System.
- [111]. [2010-01](#): A.A. Atayero, et al., Intelligent voice-based e-education system: a framework and evaluation.
- [112]. [2009-02](#): A.A. Atayero, et al., A Case-Based Reasoning Approach for Speech-Enabled e-Learning System
- [113]. [2009-01](#): A.A. Atayero, et al., A Framework for Intelligent Voice-Enabled E-Education Systems.
- [114]. [2008-05](#): A.A. Atayero, et al., Development and Deployment of VoiceXML-Based Banking Applications
- [115]. [2008-04](#): A.A. Atayero, et al., A Software-Engineered Voice-Enabled Job Recruitment Portal System
- [116]. [2008-03](#): A.A. Atayero, et al., A Multi-channel Application Framework for Customer Care Service using Best-first Search Technique
- [117]. [2008-02](#): A.A. Atayero, et al., Characterizing the Maximum Queuing Delay of a Packet Switch
- [118]. [2008-01](#): A.A. Atayero, et al., Implementation of 'ASR4CRM': An Automated Speech-Enabled Customer Care Service System
- [119]. [2007-01](#): A.A. Atayero, et al., An Information Filtering Agent for Customer Service Delivery Using Single Authoring
- [120]. [2005-02](#): A.A. Atayero, et al., Design and deployment of hybrid-telemedicine applications
- [121]. [2005-01](#): A.A. Atayero, et al., Designing a Robust e-Policing System for Developing Nations of the World
- [122]. [A2004-01](#): A.A. Atayero, et al., A Framework for M-Commerce Implementation in Nigeria

## B. BOOK CHAPTERS

- [123]. [B2016a](#): A.A. Atayero, et al., From 3GPP LTE to 5G: An Evolution

- [124]. [2015a](#): A.A. Atayero, et al., Leveraging MMWAVE Technology for Mobile Broadband/Internet of Things
  - [125]. [2013a](#): A.A. Atayero, et al., Modeling, Simulation and Analysis of Video Streaming Errors in Wireless Broadband Access Networks
  - [126]. [2013b](#): A.A. Atayero, et al., Modeling of Packet Streaming Services in Information Communication Networks
  - [127]. [2013c](#): A.A. Atayero, et al., Principles of Modeling in Information Communication Systems and Networks
  - [128]. [2013d](#): A.A. Atayero, et al., ANFIS Modeling of Dynamic Load Balancing in LTE
  - [129]. [2011a](#): A.A. Atayero, et al., Voice-Based e-Learning Approach for e-Government
  - [130]. [C2010a](#): A.A. Atayero, et al., Application of VoiceXML in e-Learning Systems.
- 

### C. BOOKS

- [131]. [D2016a](#): A.A. Atayero, et al., Digital Proceedings, 3rd Covenant University International Conference on African Development Issues
  - [132]. [2013a](#): A.A. Atayero, et al., Integrated Models for Information Communication Systems and Networks: Design and Development
  - [133]. [2013b](#): A.A. Atayero, et al., Design and Development of CUvLab: iOS-Based Virtual ECE Laboratory.
  - [134]. [2012a](#): A.A. Atayero, et al., Development of a Web-based Brown-eyed Iris Corpus for Robust Iris Biometric Research
  - [135]. [2012b](#): A.A. Atayero, et al., Adaptive Neuro-Fuzzy Inference System Models for Dynamic Load Balancing in 3GPP LTE
  - [136]. [2012c](#): A.A. Atayero, et al., Determination of End-To-End Delays of Switched Local Area Networks: Designing Upper Delay-Bounded Switched LANs
  - [137]. [E2007a](#): A.A. Atayero, et al., Proc., The International Conference on 3G GSM and Mobile Computing: An Emerging Growth Engine for National Development.
-